

**Dover BF 013-1(20)
Bridge 59 on VT Route 100
over the Deerfield River
Public 502 Informational Hearing**



**Presented by
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Meeting Outline

- Purpose of the Meeting
- Existing bridge information
- Proposed project information
- Next Steps
- Questions

DOVER, VT 100, BR 59

DOVER,
VT 100, BR 59

Purpose of Meeting

- Present the Conceptual plans
- Provide you with the chance to ask questions
- Provide you with the chance to voice concerns
- Build consensus for the proposed project-

Phases of Development

Project
Funded

Project
Defined

Contract
Award

Project Definition

Project Design

Construction

Identify resources &
constraints

Evaluate alternatives

Public Participation

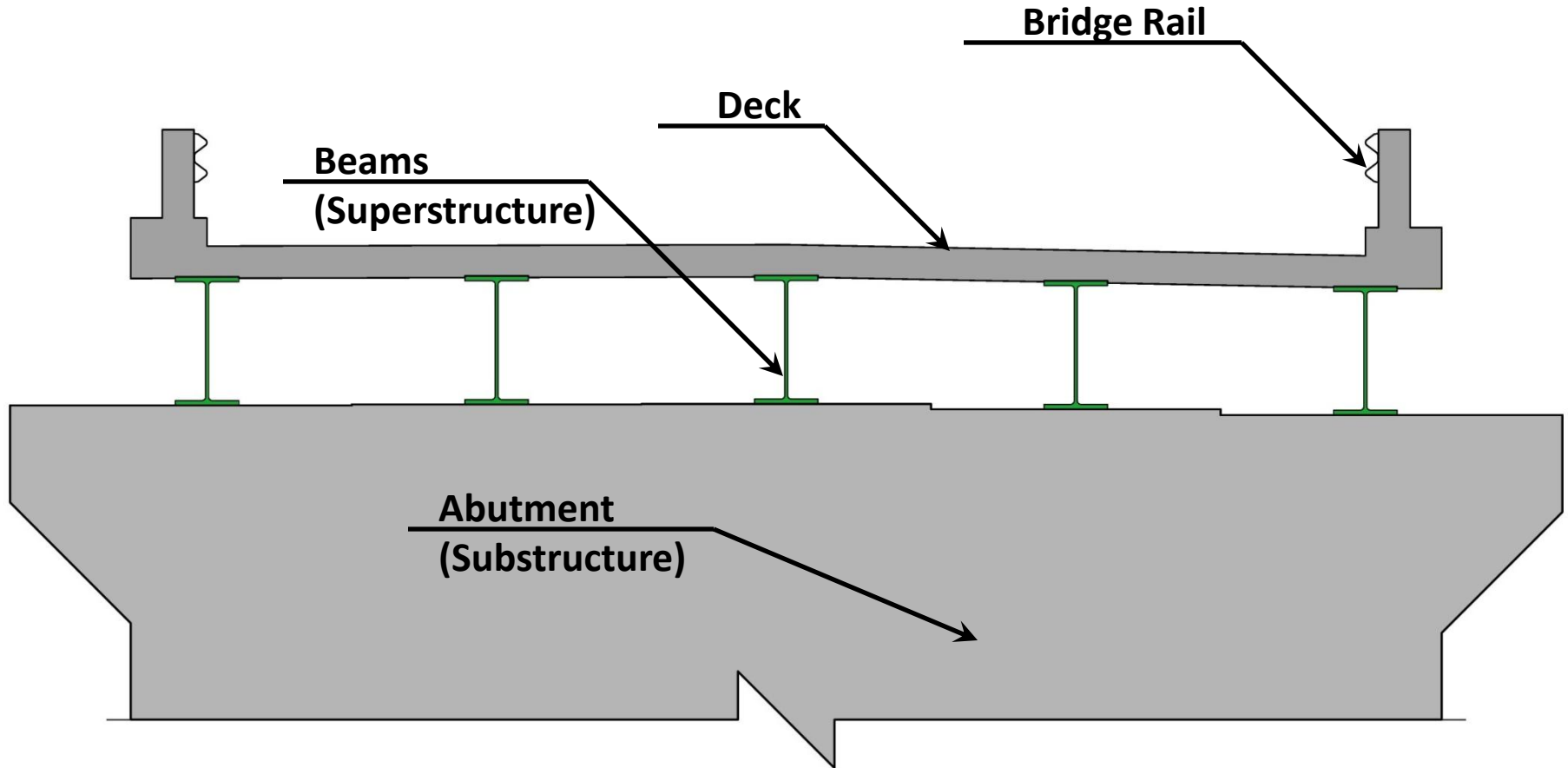
Build Consensus

- Quantify areas of impact

- Environmental permits

- Develop plans, estimate and specifications

Description of Terms Used



Cross Section of Bridge

Project Background

- The structure is owned and maintained by the State
- Funding will be 80/20 Federal/State (no local funds)
- Functionally labeled as a Rural Minor Arterial
- Posted Speed = 40 mph (Design Speed)
- Existing bridge is a single-span concrete T-beam that was widened with a concrete slab in 1978
- Bridge length = 35 feet
- Bridge Width = 35 feet
- The bridge was built in 1926 (88 years old)

Alternatives Study

- An Alternative Presentation meeting was held on 2/19/14
- Vtrans recommended replacing the bridge using Accelerated Bridge Construction techniques and a 4 week bridge closure
- The proposed detour used local roads so we needed the permission from local officials
- The Town's of Dover and Wilmington did not give permission to use their roads
- The scope of the project was revised to include maintaining traffic on a 2-way temporary bridge

Traffic Data

	“Current Year” 2016	“Design Year” 2036
Average Annual Daily Traffic	4,900	5,200
Design Hourly Volume	890	950
Average Daily Truck Traffic	390	630
%Trucks	6.0	9.1

EXISTING BRIDGE DEFICIENCIES

Inspection Rating Information (Based on a scale of 9)

Bridge Deck Rating	4 Poor
Superstructure Rating	6 Satisfactory
Substructure Rating	6 Satisfactory

Rating Definitions

9 Excellent
8 Very Good
7 Good
6 Satisfactory
5 Fair
4 Poor
3 Serious
2 Critical
1 Imminent Failure

Deficiencies

- The bridge is structurally deficient with a Poor deck rating
- The bridge railing does not meet current standards
- The bridge does not meet the hydraulic standards

Looking north over Bridge



05.15.2013

Looking south over Bridge



Failed downstream wingwall



Underside of Concrete Deck



Delamination in Underside of Concrete Deck



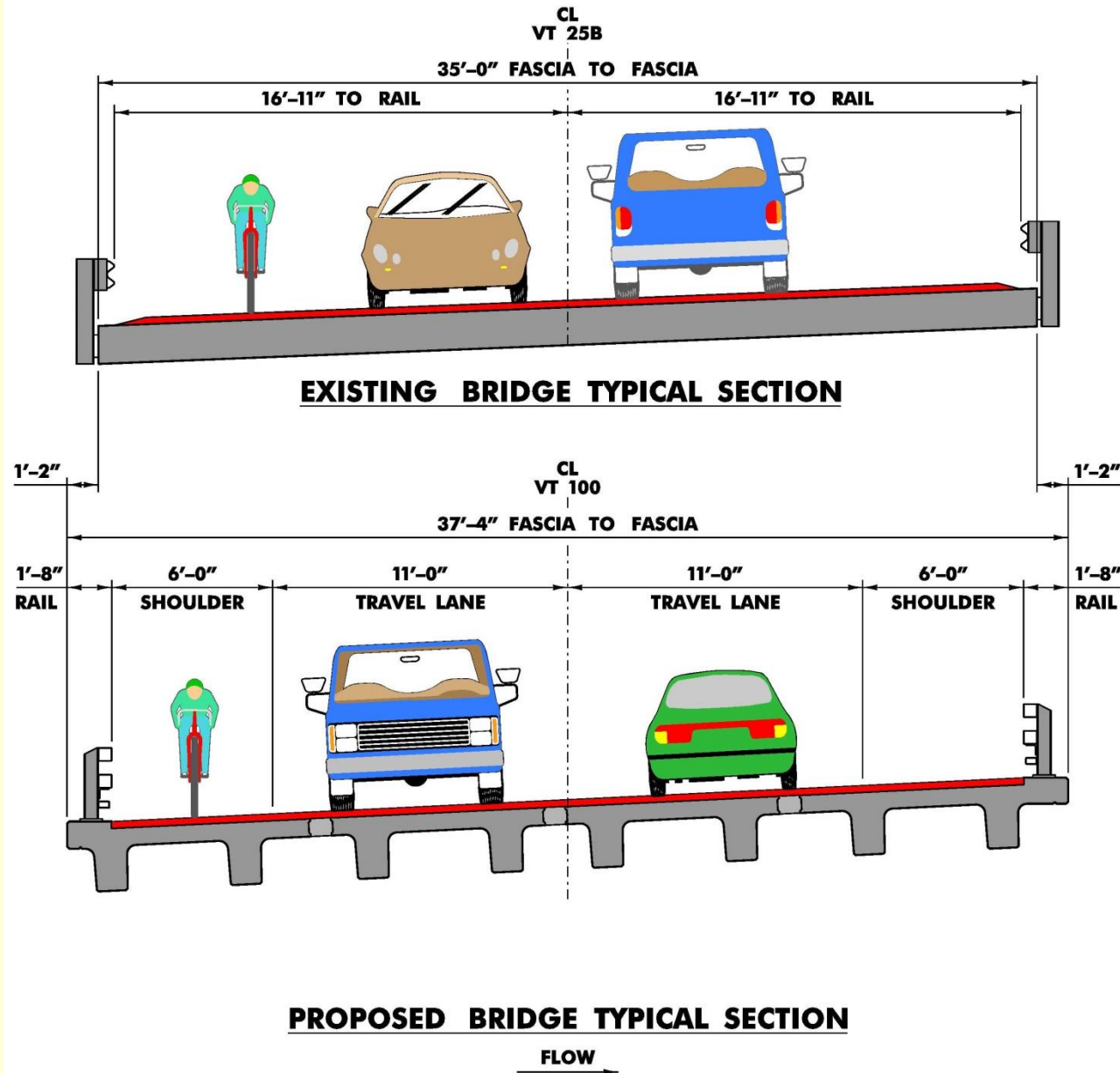
Proposed Project

- Complete bridge replacement warranted
- Use 11' lanes and 6' shoulders (34' rail-rail width)
- Use 65' single span bridge
- Maintain existing centerline of road
- Maintain existing profile (grade) of road

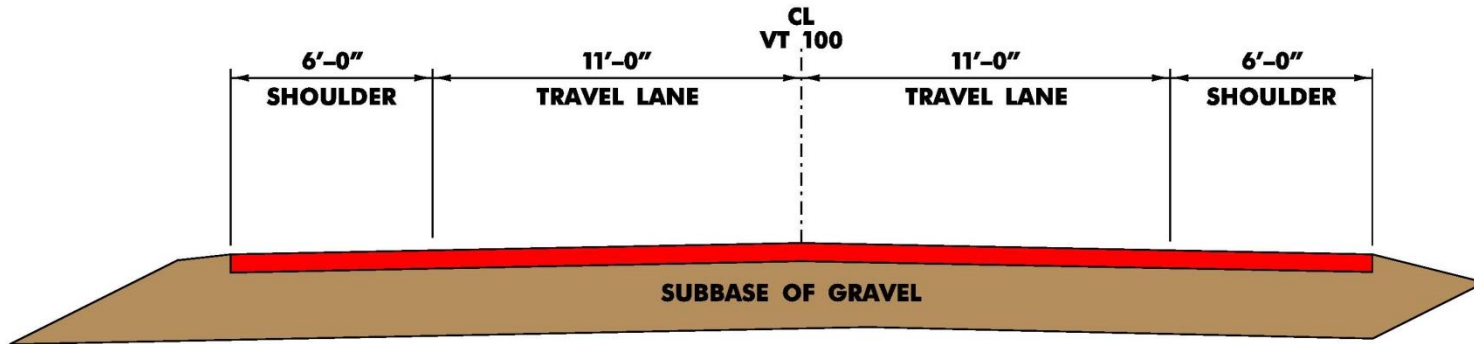
Important Issues

- Pedestrian/Bicycle Traffic
 - Obtained preliminary information from Town
 - Coordinated with Bike/Ped Program Manager
 - Maintaining bike/ped traffic in shared use shoulder is best
- Elimination of second residential drive on south end
 - There are two access points to one residential property
 - We have found no evidence that either are permitted drives
 - Access Management guidelines attempt to reduce access points
 - The guard rail transition extends across the northern access point
 - The southern access point will not be affected by the project

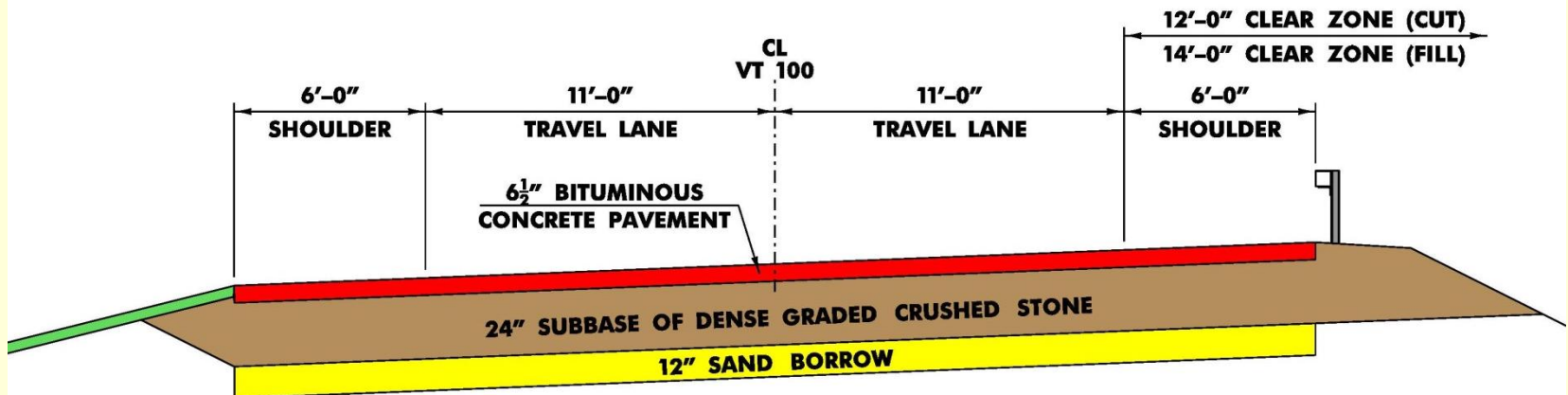
Bridge Typical



Roadway Typical

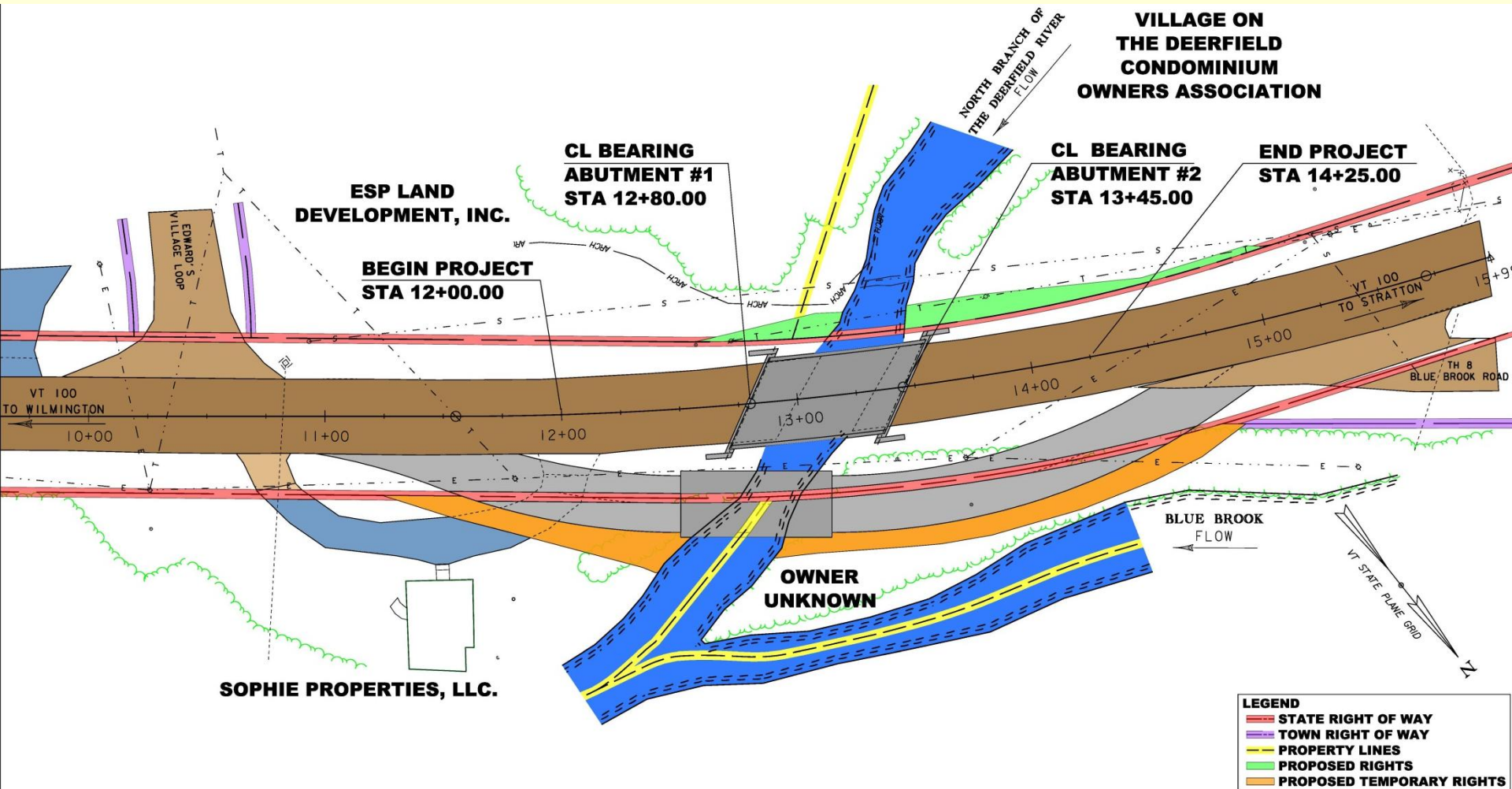


EXISTING VT 100 TYPICAL SECTION

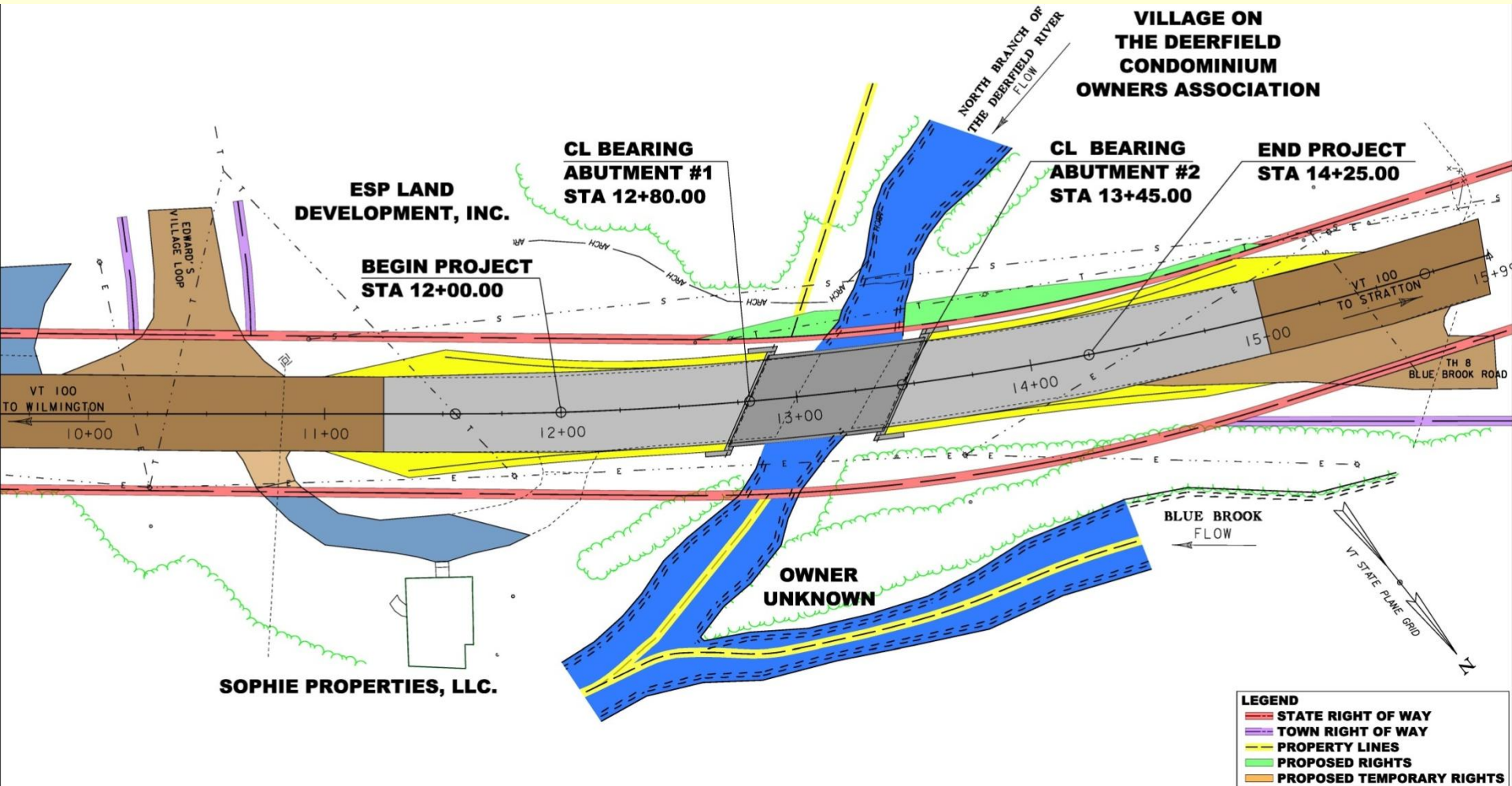


PROPOSED VT 100 TYPICAL SECTION

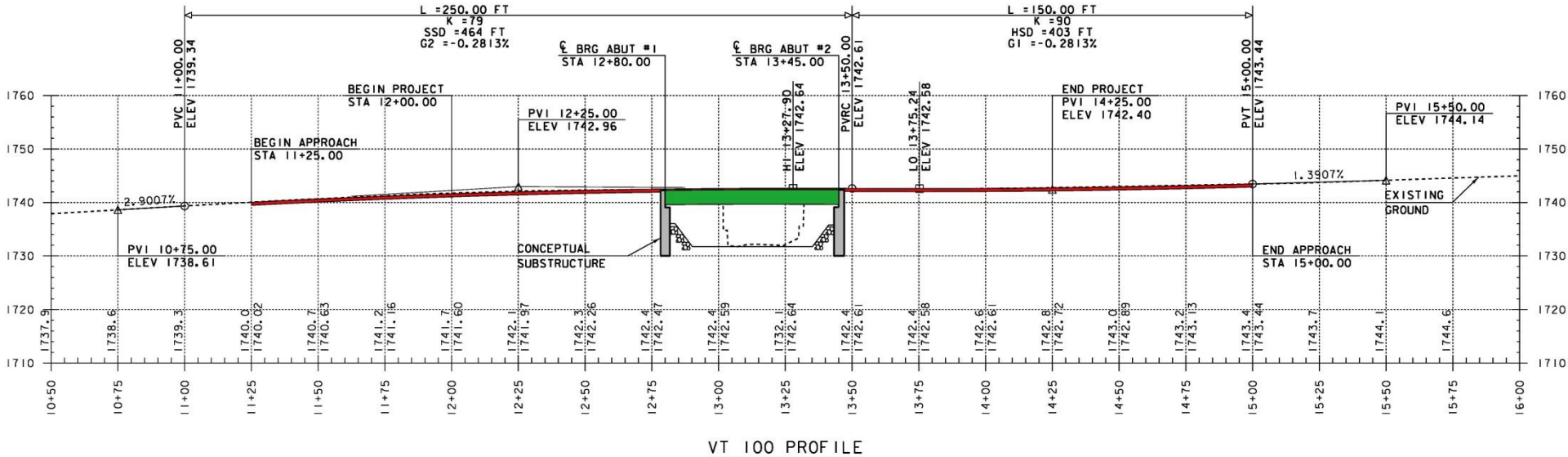
Proposed Layout showing ROW impacts



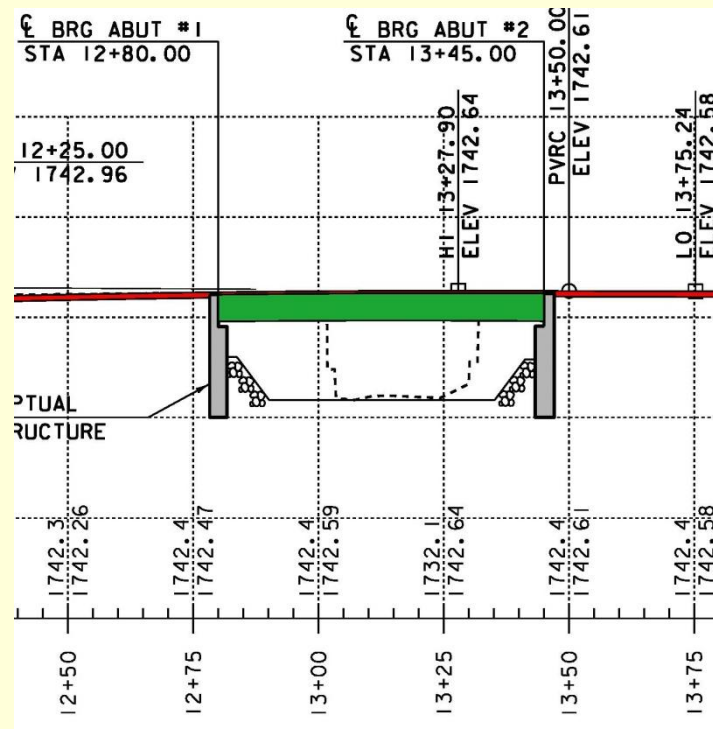
Final Conditions Layout



Proposed Profile



Enlarged view of bridge



Scope - Cost - Schedule

The project cost and schedule can not be determined until the scope of the project is clearly defined.

Preliminary Engineering (w/ Scoping)	\$ 365,000
Right-of-Way	\$ 115,000
Construction w/ CE and Contingencies	\$1,620,000
Total	\$2,100,000

- Construction is currently scheduled for 2019
- Many factors can effect construction year
- Construction year is assuming Federal & State funding is available (project is funded 80% Fed – 20% State)

Next Steps

This is a list of a few important activities expected in the near future and is not a complete list of activities.

- Consider comments received at Public Meeting
- Provide written response to Town with decisions
- PROJECT DEFINED
- Develop Preliminary Plans
- Environmental permitting process
- Meet with adjacent property owners
- Right-of-Way acquisition process
- Final design details

Questions



Direct any questions to:

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**This presentation is available at the
web address shown below**

<https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/13B058>